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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,833	07/15/2003	John Prevost	1.913.2	7387

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EXAMINER	
MARX, IRENE	

ART UNIT	PAPER NUMBER
1651	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/619,833	PREVOST ET AL.	
	Examiner	Art Unit	
	Irene Marx	1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The amendment filed 6/13/06 is acknowledged. Claims 1-7 and 29 are being considered on the merits.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singh *et al.* taken with Dote *et al.*, Erlich (U.S. Patent No. 2,446,913, Wilson (U.S. Patent No. 3,721,568), Ganguli *et al.*(U.S. Patent No. 5,998,641) and Langley *et al.* (U.S. Patent No. 5,801,140) for the reasons as stated in the last Office action and the further reasons below.

The claims are directed to a process of recovering an oil stream from the whole stillage produced in the production of ethanol from an oil-bearing agricultural product by extracting oil from the solids rich stream and/or the water rich stream.

Singh *et al.* and Dote *et al.* disclose the extraction of oil from oil-bearing agricultural product which are corn distillers dried grains or other stillage produced from ethanol production. See, e.g., page 1775 and page 286, respectively. In each of the references, oil extraction was carried out by extraction and separation of an oil phase from a water phase. See, e.g., Singh *et al.*, page 1775, last paragraph and Dote *et al.* page 286.

The references differ from the claimed invention in that oil removal stage is carried out on dried distillers solubles or stillage rather than on the wet product, as well as in that the process of separation of the aqueous phase and oil phase and in the use of distillation rather than evaporation to eliminate water from the oil phase.

However, the direct recovery of products directly from wet stillage streams is old and well known in the art. For example, Erlich teaches a process of recovering a substantially free

flowing product from thin stillage See, e.g., Figure; col. 5, lines 44-50 and col. 6, lines 14-25; and Wilson discloses a process of recovering spent grains or stillage wherein the origin of the stillage is the distillation of any grain mixture of malt, rye, corn, oats, wheat, etc., which are oil containing at least to some extent.

In addition, Ganguli teaches decantation and centrifugation as suitable processes to separate an oil phase and a water phase. See, e.g., col. 1, lines 19-23 and Example 1, col. 5, line 21. With respect to distilling off the water as a separation method from the oil, this particular aspect is taught by Langley *et al.*(See, e.g., col. 3, lines 35-40.)

The process conditions discussed in the references appear to be substantially the same as claimed. However, even if they are not, the adjustment of process conditions for optimization purposes identified as result-effective variables cited in the references would have been prima facie obvious to a person having ordinary skill in the art, since such adjustment is at the essence of biotechnical engineering.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the process of recovering an oil stream from the whole stillage produced in the production of ethanol from an oil-bearing agricultural product by extracting oil from the solids rich stream and/or the water rich stream by modifying the raw materials of the processes of Singh *et al.* and Dote *et al.* by replacing the dried compositions with the wet streams results from the production of ethanol, as suggested by Erlich and Wilson and using the some of the process protocols taught by Ganguli *et al.* and Langley *et al.* including decantation, centrifugation and distillation for the expected benefit of efficiently providing a useful oil product from residues of the ethanol producing industries suitable for animal feeds or for human consumption and at the same time providing a means of recycling stillage from ethanol production.

Thus, the claimed invention as a whole was clearly *prima facie* obvious, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments have been fully considered but they are not deemed to be persuasive.

Applicant(s) argue(s) that not all of the limitations are met by the references. However, the only limitation addressed is the wet stream aspect of the claim. It must be remembered that the references are relied upon in combination and are not meant to be considered separately as in a vacuum. It is the combination of all of the cited and relied upon references which make up the state of the art with regard to the claimed invention.

Applicants also argue lack of motivation to combine references. However, motivation can come not only from direct teaching of the prior art, but also the nature of the problem to be solved and/or the knowledge of persons of ordinary skill in the art, Ruiz v. A.B. Chance Co. 357 F.3d 1270, 69 USPQ2d 1686 (2004). The cited references are in the same field of endeavour and seek to solve the same problems as the instant application and claims, and one of skill in the art is free to select components available in the prior art, *In re* Winslow, 151 USPQ 48 (CCPA, 1966). Further, the examiner recognizes that references cannot be arbitrarily combined that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references, *In re* Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. One test for combining references is what the combination of dislosures taken as a whole would suggest to one versed in the art, rather than by their specific disclosures, *In re* Bozek, 163 USPQ 545 (CCPA 1969). In this case, Erlich is clearly directed to the recovery of valuable products from waste liquids produced in agricultural processes, such as the solids rich stream and/or the water rich stream (col. 1, lines 1-5).

Even though the Erlich reference does not specifically mention the recovery of oils as valuable products, one of ordinary skill in the art would have recognized at the time the claimed invention was made that oils are present in the liquid streams from the disclosure of Singh *et al.* and Dote *et al.* who disclose the extraction of oil from oil-bearing agricultural products which are corn distillers dried grains or other stillage produced from ethanol production. In this regard, there is nothing on the record to suggest that the "oil removal stage" differs substantially whether the material subjected to the process is dry or wet.

Therefore, applicant's arguments fail to persuade, the rejection is deemed proper and it is adhered to.

No claim is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irene Marx whose telephone number is (571) 272-0919. The examiner can normally be reached on M-F (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300 .

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Irene Marx
Primary Examiner
Art Unit 1651